



## **SKIN CANCER**

### **DEFINITION**

Skin cancer is the most common of all cancers in humans. More than a million new skin cancers are diagnosed every year, and they are almost always completely curable if caught early enough. More than 90% of all skin cancers are caused by exposure to the sun's harmful ultraviolet rays. The effects of sunlight exposure are cumulative, and each unprotected exposure increases one's lifetime risk of developing skin cancer. Family history, long-term exposure to certain chemicals such as tar, and scarring processes such as chronic burns can all make development of skin cancer more likely. Fortunately, most cancers (and precancerous lesions) of the skin are visualized by a dermatologist and can often be felt by the fingers while they are still very small. The location of the tumor on (or just under) the skin eases the task of total removal.

The three most common skin cancers are basal cell carcinoma (BCC), squamous cell carcinoma (SCC), and malignant melanoma (MM). Sunscreen and sun avoidance is the best way to prevent skin cancer. It is also very important for patients to be able to recognize cancers early in order to seek appropriate treatment.

### **BASAL CELL CARCINOMA (BCC)**

Basal cell carcinoma is the most common form of skin cancer. These slow growing tumors give warning signs well in advance of serious stages. Lesions begin as a raised, translucent, pearly nodule that may eventually ulcerate and bleed. They are caused by both cumulative and intermittent sun exposure or by tanning booth exposure. They appear most frequently after age 30 and predominantly on sun exposed areas such as the face, arms, and back. These cancers almost never metastasize (spread) and simple in-office destruction or excision will cure them when small. Larger lesions or lesions in more complicated areas such as the eyelid may require more advanced Mohs surgery by a specifically trained dermatologic surgeon. While these cancers usually don't spread, they commonly recur. Regular follow-up visits must be made to monitor all areas of skin in patients with a history of basal cell carcinoma. About 50% of all patients will grow new basal cell carcinomas within 5 years after successful removal of an initial BCC. Once your skin has gotten enough sun damage to grow one of these tumors, other areas of sun damage may begin to show cancerous changes as well.

### **SQUAMOUS CELL CARCINOMA (SCC)**

Squamous cell carcinoma is another common skin cancer that appears as a raised, pink to red opaque patch or nodule that can also ulcerate in the center. They may grow rapidly in some cases, and may appear dry, hard, or warty. Long-term, cumulative sun exposure is the most common cause. These lesions rarely spread and can usually be cured by excision or destruction in the office. Complicated, large, or recurrent lesions are usually referred to a medical center for excision or Mohs microsurgery. A small percentage of SCC may become invasive.

Actinic keratoses are pre-malignant lesions that appear as rough, thick skin on sun-exposed areas that show less scaling than cancers. Actinic keratoses left untreated may turn into SCC and are a frequent warning for development of other skin cancers. These lesions are frequently cured by cryosurgery using liquid nitrogen.

## **MALIGNANT MELANOMA**

Melanoma is one of the most serious skin cancers and can be life-threatening if allowed to advance. Lesions usually present as brown-black or multicolored plaques or nodules with an irregular border. They may ulcerate, crust, or bleed. Rarely, a melanoma will arise in a preexisting mole that has an irregular border or multiple colors. Any irregular, symptomatic, or changing mole should be brought to the attention of your dermatologist. Look for the ABCDE warning signs:

- Asymmetry
- Border irregularity
- Color variation
- Diameter greater than 0.6cm (larger than a pencil eraser)
- Evolving, enlarging, or changing moles

There is no rule of thumb by which a person can identify a skin condition as cancerous. When a pigmented growth or red, scaly blemish begins to grow, bleeds, or changes in character, it is best to seek the advice of a dermatologist. We can usually reassure you that a lesion is benign, but often it is necessary to sample the area for microscopic study (a test known as a biopsy). It is of greatest importance that a tumor be diagnosed as cancer before any method of treatment is selected. A non-cancerous growth may be ignored or treated with methods that will leave less scarring. Even when cancer is diagnosed, less aggressive types can be removed without much damage to surrounding tissue. Each treatment will be individualized to the patient, taking into consideration the type of cancer, its development, location, and many other factors.

## **SKIN CANCER PREVENTION**

While actinic keratoses and skin cancers are almost always curable when detected and treated early, prevention is still the best line of defense. Here are some sun safety habits that should be part of everyone's daily health care:

- Seek the shade, especially between 10 AM and 4 PM when the sun is most dangerous.
- Do not burn.
- Avoid tanning and tanning booths (ALL tanning booths are dangerous and cause skin cancer).
- Cover up with clothing, including a broad-brimmed hat and UV-blocking sunglasses.
- Use a sunscreen with an SPF of 30 or higher every day. Recommended brands include:

Neutrogena with Helioplex	Aveeno	Ombrelle
Solbar	Oil of Olay	Anthelios
Shade	Presun	Cetaphil
- Apply 1 ounce (2 tablespoons) of sunscreen to the entire body 30 minutes before going outside. Reapply every two hours or after swimming or excessive sweating.
- Keep newborns out of the sun. Sunscreens should be used on babies over the age of 6 months.
- Examine your skin from head to toe once a month to monitor for new or changing lesions.
- See your dermatologist every year for a professional skin cancer exam.

